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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,376	10/27/2003	Divya Gupta	P17142	5306

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EXAMINER
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TRAN, PHUC H

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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11/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/695,376

Applicant(s)

GUPTA ET AL.

Examiner

PHUC H. TRAN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 12-18, 20-22, 24, 25, 27-32, 34-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 7, 11, 19, 23, 26, 33 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 27-38 are objected to because of the following informalities: “article of manufacture” should be rewritten as “computer readable storage medium”. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-10, 13-18, 20-22, 24, 25, 27-32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Bilic et al. (U.S. Patent No. 2001/0053148 A1).

- With respect to claims 1, 8, 13, 20, 24 & 27, Bilic teaches a method for constructing a packet comprising: receiving a request to construct one packet (e.g. page 4 paragraph 65 line 4 the request for the frame from CPU), including information on at least one header and a payload to include in the packet (e.g. the packet in Bilic has header and payload);

generating the at least one header for the received request; writing the generated at least one header in a first queue (e.g. Fig. 2 shows the header FIFO 72 and 74);

requesting the payload to include in the packet; writing the received payload to a second queue (e.g. Fig. 2 shows data FIFO 70);

reading the generated at least one header and payload from the first and second queues; and including the read at least one header and payload in the packet (e.g. link 40 read data and header from 70 and 74 to include in the packet).

- With respect to claims 2, 14, & 28, Bilic teaches transmitting the constructed packet to a target node (e.g. block 89 in Fig. 3).

- With respect to claims 3, 15, & 29, Bilic discloses signaling header complete in response to writing one header to the first queue; and signaling payload complete in response to writing the payload to the second queue (e.g. steps 80-88 in Fig. 3).

- With respect to claims 4, 16, & 30, Bilic teaches wherein the at least one header and payload are included in the packet in response to receiving signals that all headers for the packet to construct are written to the first queue and the payload for the packet to construct is written to the second queue (e.g. Fig. 2 shows the header FIFO and data FIFO).

- With respect to claims 5, 17, & 31, Bilic teaches wherein writing the header and signaling header complete are performed by a header engine (e.g. Fig. 2 shows block 34 and 38), wherein writing the received payload and signaling payload complete are performed by a payload engine (e.g. Fig. 2 shows the block 32), and wherein including the read at least one header and payload in the packet are performed by a completion engine in response to receiving the signals (e.g. step 76 in Fig. 3).

- With respect to claims 6, 18, 25, & 32, Bilic teaches wherein headers and payload for a first packet may be buffered in the first and second queues before a second packet preceding the first packet is constructed (e.g. Fig. 2 shows the FIFO queue).

- With respect to claims 9-10, 21-22, & 35-36, Bilic teaches wherein writing the at least one header to the first queue, writing the payload to the second queue, and reading the at least one header and payload from the first and second queues are performed in different clock domains (e.g. steps in Fig. 3 and 5 shows step write and read from FIFOs).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilic et al. (U.S. Patent No. 2001/0053148 A1) in view of Kim et al. (U.S. Patent No. 5446738).

- With respect to claims 12, & 38, Bilic discloses all the aspect of the claimed invention as set forth above but fails to teach wherein one packet to construct may include at least one header and no payload, and wherein the at least one generated header is included in the packet in response to receiving signals indicating that the headers have been generated and determining that the packet to construct does not include payload. Kim teaches packet constructed that may include at least one header and no payload (col. 10, lines 16-18) for keeping communication in the same rate that is required. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the empty payload in the packet for communication between nodes to keep the communication at the same rate.

*Allowable Subject Matter*

6. Claims 7, 11, 19, 23, 26, 33, & 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892

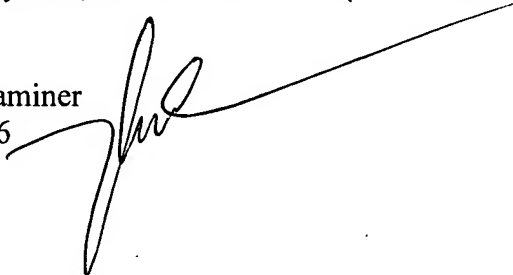
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172.

The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran  
Assistant Examiner  
Art Unit 2616



P.t  
11/17/07